

WHAT IS CLAIMED IS:

1. A method of performing financial processing in a computer, comprising:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned} \text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)} \end{aligned}$$

(c) wherein the Net Interest Revenue (NIR) is calculated as:

$$\begin{aligned} \text{NIR} &= \text{Interest Revenue} \\ &- \text{Cost of Funds} \\ &+ \text{Value of Funds} \\ &- \text{Interest Expense} \\ &+ \text{Earnings on Allocated Equity}; \end{aligned}$$

(d) wherein the Cost of Funds includes Allocated Balances that are used to assign balance sheet amounts that are not actual account balances to the accounts for the calculated Net Interest Revenue (NIR).

2. The method of claim 1, wherein the Allocated Balances are selected from a group comprising Float, Fixed Assets, Payables and Receivables balances.

3. The method of claim 1, wherein the accounts that receive the Allocated Balances are selected based upon the account attributes.

4. The method of claim 1, wherein the Allocated Balances are apportioned among the accounts using a method selected from a group comprising:

(1) an Account Counts method that provides allocated balance amounts based on a percentage of total accounts each account represents;

(2) an Account Balance Amount method that provides allocated balance amounts based on a percentage of total account balance each account represents;

(3) an Event Count method that provides allocated balance amounts based on a percentage of total events each account represents; and

(4) an Event Balance Amount method that provides allocated balance amounts based on a percentage of total event balances each account represents.

5. The method of claim 1, further comprising performing summations over the possible balance variables for the account according to the following:

$$\text{Int Inc}(a) = \sum AB_{(\text{asset},t)}(a) * \text{eff rate}_{(\text{asset},t)}(a),$$

$$\text{COF}(a) = \sum AB_{(\text{asset},t)}(a) * R_{(\text{asset},t)}(\text{pt}(a)),$$

$$\text{Int Exp}(a) = \sum AB_{(\text{liability},t)}(a) * \text{eff rate}_{(\text{liability},t)}(a), \text{ and}$$

$$\text{VOF}(a) = \sum AB_{(\text{liability},t)}(a) * R_{(\text{liability},t)}(\text{pt}(a)),$$

wherein:

$AB_{(c,t)}(a)$  = Average Balances of account a, wherein c is a balance class and t is a balance tier,

$\text{eff rate}_{(c,t)}(a)$  = Effective interest rate for the account a,

$\text{pt}(a)$  = Product type for account a,

$R_{(c,t)}(\text{pt}(a))$  = Treatment rate for accounts of the product type given the balance class and tier,

$\text{Int Inc}(a)$  = Interest Income of account a,

$\text{COF}(a)$  = Cost of Funds for account a,

$\text{Int Exp}(a)$  = Interest Expense for account a, and

$\text{VOF}(a)$  = Value of Funds for account a.

6. The method of claim 1, wherein an Intermediate tier calculation of the Allocated Balances allows for multiple balances on a single account, as well as the determination of treatment rate based on product type and balance type.

7. The method of claim 1, wherein an Advanced tier calculation of the Allocated Balances allows for specification of a product-level prepayment rate for the accounts.

8. The method of claim 1, wherein an Advanced tier calculation of the Allocated Balances allows loan spread, deposit spread and asset/liability spread to be separated and assigned to the accounts that generate the spreads.

9. The method of claim 1, wherein a Breakthrough tier calculation of the Allocated Balances uses a transfer price for every account based on matched maturity funding and predicted account behaviour.

10. The method of claim 1, wherein a Breakthrough tier calculation of the Allocated Balances allows behavioral features, product and account features to be used to identify a transfer rate.

11. A system for financial processing, comprising:  
a computer;  
logic, performed by the computer, for:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\text{Profit} = \text{Net Interest Revenue (NIR)}$$

- + Other Revenue (OR)
- Direct Expense (DE)
- Indirect Expense (IE)
- Risk Provision (RP)

5 (c) wherein the Net Interest Revenue (NIR) is calculated as:

$$\begin{aligned}
 \text{NIR} &= \text{Interest Revenue} \\
 &- \text{Cost of Funds} \\
 &+ \text{Value of Funds} \\
 &- \text{Interest Expense} \\
 10 &+ \text{Earnings on Allocated Equity;}
 \end{aligned}$$

(d) wherein the Cost of Funds includes Allocated Balances that are used to assign balance sheet amounts that are not actual account balances to the accounts for the calculated Net Interest Revenue (NIR).

15 12. The system of claim 11, wherein the Allocated Balances are selected from a group comprising Float, Fixed Assets, Payables and Receivables balances.

13. The system of claim 11, wherein the accounts that receive the Allocated Balances are selected based upon the account attributes.

20 14. The system of claim 11, wherein the Allocated Balances are apportioned among the accounts using a method selected from a group comprising:

(1) an Account Counts method that provides allocated balance amounts based on a percentage of total accounts each account represents;

25 (2) an Account Balance Amount method that provides allocated balance amounts based on a percentage of total account balance each account represents;

(3) an Event Count method that provides allocated balance amounts based on a percentage of total events each account represents; and

30 (4) an Event Balance Amount method that provides allocated balance amounts based on a percentage of total event balances each account represents.

15. The system of claim 11, further comprising logic for performing summations over the possible balance variables for the account according to the following:

$$\text{Int Inc}(a) = \sum AB_{(\text{asset},t)}(a) * \text{eff rate}_{(\text{asset},t)}(a),$$

$$\text{COF}(a) = \sum AB_{(\text{asset},t)}(a) * R_{(\text{asset},t)}(\text{pt}(a)),$$

$$\text{Int Exp}(a) = \sum AB_{(\text{liability},t)}(a) * \text{eff rate}_{(\text{liability},t)}(a), \text{ and}$$

$$\text{VOF}(a) = \sum AB_{(\text{liability},t)}(a) * R_{(\text{liability},t)}(\text{pt}(a)),$$

wherein:

$AB_{(c,t)}(a)$  = Average Balances of account a, wherein c is a balance class and t is a balance tier,

10  $\text{eff rate}_{(c,t)}(a)$  = Effective interest rate for the account a,

$\text{pt}(a)$  = Product type for account a,

$R_{(c,t)}(\text{pt}(a))$  = Treatment rate for accounts of the product type given the balance class and tier,

$\text{Int Inc}(a)$  = Interest Income of account a,

15  $\text{COF}(a)$  = Cost of Funds for account a,

$\text{Int Exp}(a)$  = Interest Expense for account a, and

$\text{VOF}(a)$  = Value of Funds for account a.

20 16. The system of claim 11, wherein an Intermediate tier calculation of the Allocated Balances allows for multiple balances on a single account, as well as the determination of treatment rate based on product type and balance type.

25 17. The system of claim 11, wherein an Advanced tier calculation of the Allocated Balances allows for specification of a product-level prepayment rate for the accounts.

18. The system of claim 11, wherein an Advanced tier calculation of the Allocated Balances allows loan spread, deposit spread and asset/liability spread to be separated and assigned to the accounts that generate the spreads.

19. The system of claim 11, wherein a Breakthrough tier calculation of the Allocated Balances uses a transfer price for every account based on matched maturity funding and predicted account behaviour.

20. The system of claim 11, wherein a Breakthrough tier calculation of the Allocated Balances allows behavioral features, product and account features to be used to identify a transfer rate.

21. An article of manufacture embodying logic for performing financial processing in a computer, comprising:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}\end{aligned}$$

(c) wherein the Net Interest Revenue (NIR) is calculated as:

$$\begin{aligned}\text{NIR} &= \text{Interest Revenue} \\ &- \text{Cost of Funds} \\ &+ \text{Value of Funds} \\ &- \text{Interest Expense} \\ &+ \text{Earnings on Allocated Equity};\end{aligned}$$

(d) wherein the Cost of Funds includes Allocated Balances that are used to assign balance sheet amounts that are not actual account balances to the accounts for the calculated Net Interest Revenue (NIR).

22. The article of manufacture of claim 21, wherein the Allocated Balances are selected from a group comprising Float, Fixed Assets, Payables and Receivables balances.

23. The article of manufacture of claim 21, wherein the accounts that receive the Allocated Balances are selected based upon the account attributes.

24. The article of manufacture of claim 21, wherein the Allocated Balances are apportioned among the accounts using a method selected from a group comprising:

(1) an Account Counts method that provides allocated balance amounts based on a percentage of total accounts each account represents;

(2) an Account Balance Amount method that provides allocated balance amounts based on a percentage of total account balance each account represents;

(3) an Event Count method that provides allocated balance amounts based on a percentage of total events each account represents; and

(4) an Event Balance Amount method that provides allocated balance amounts based on a percentage of total event balances each account represents.

25. The article of manufacture of claim 21, further comprising performing summations over the possible balance variables for the account according to the following:

$$\text{Int Inc}(a) = \sum AB_{(\text{asset},t)}(a) * \text{eff rate}_{(\text{asset},t)}(a),$$

$$\text{COF}(a) = \sum AB_{(\text{asset},t)}(a) * R_{(\text{asset},t)}(\text{pt}(a)),$$

$$\text{Int Exp}(a) = \sum AB_{(\text{liability},t)}(a) * \text{eff rate}_{(\text{liability},t)}(a), \text{ and}$$

$$\text{VOF}(a) = \sum AB_{(\text{liability},t)}(a) * R_{(\text{liability},t)}(\text{pt}(a)),$$

wherein:

$AB_{(c,t)}(a)$  = Average Balances of account a, wherein c is a balance class and t is a balance tier,

$\text{eff rate}_{(c,t)}(a)$  = Effective interest rate for the account a,

$\text{pt}(a)$  = Product type for account a,

$R_{(c,t)}(\text{pt}(a))$  = Treatment rate for accounts of the product type given the

		balance class and tier,
	Int Inc(a)	= Interest Income of account a,
	COF (a)	= Cost of Funds for account a,
	Int Exp (a)	= Interest Expense for account a, and
5	VOF (a)	= Value of Funds for account a.

26. The article of manufacture of claim 21, wherein an Intermediate tier calculation of the Allocated Balances allows for multiple balances on a single account, as well as the determination of treatment rate based on product type and balance type.

10

27. The article of manufacture of claim 21, wherein an Advanced tier calculation of the Allocated Balances allows for specification of a product-level prepayment rate for the accounts.

15

28. The article of manufacture of claim 21, wherein an Advanced tier calculation of the Allocated Balances allows loan spread, deposit spread and asset/liability spread to be separated and assigned to the accounts that generate the spreads.

20

29. The article of manufacture of claim 21, wherein a Breakthrough tier calculation of the Allocated Balances uses a transfer price for every account based on matched maturity funding and predicted account behaviour.

25

30. The article of manufacture of claim 21, wherein a Breakthrough tier calculation of the Allocated Balances allows behavioral features, product and account features to be used to identify a transfer rate.